20

25

30

5

WHAT IS CLAIMED IS:

1. A method for avoiding interference in a wireless telecommunication system, comprising:

providing communication between a first and second component at an initial frequency;

determining a plurality of successive line quality indicators at a line quality monitor of the first component;

summing consecutive line quality indicators over a predetermined time to determine a slow hop count;

determining whether the slow hop count is greater than a slow hop threshold;

determining whether to provide communication with the first component at a second frequency when the slow hop count is greater than the slow hop threshold, the determination based on a power level of the second component and a communication strength received from the second component at the first component; and

communicating a signal from the first component to the second component requesting the second component to provide communication at the second frequency.

- 2. The method of Claim 1, the first component comprising a mobile unit and the second component comprising a base unit.
- 3. The method of Claim 1, the first component comprising a base unit and the second component comprising a mobile unit.

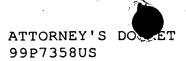
٠5

- 4. The method of Claim 1, further comprising providing communication with the first component at the second frequency when a specified number of consecutive line quality indicators is greater than a fast hop threshold.
- 5. The method of Claim 4, the first component comprising a mobile unit and the second component comprising a base unit.
- 6. The method of Claim 4, the first component comprising a base unit and the second component comprising a mobile unit.

20

25

5



- A system for avoiding interference in a wireless telecommunication system, comprising:
 - a first component;
- a second component for providing wireless communication with the first component at an initial frequency;
- a line quality monitor for the first component, the line quality monitor for determining a plurality of successive line quality indicators;
- a slow hop counter for summing consecutive line quality indicators over a predetermined time to determine a slow hop count and for determining whether the slow hop count is greater than a slow hop threshold;

an error detector for determining whether to provide communication with the first component at a second frequency when the slow hop count is greater than the slow hop threshold, the determination based on a power level of the second component and a communication strength received from the second component at the first component; and

the first component operable to communicate a signal to the second component requesting the second component to provide communication at the second frequency.

- 8. The system of Claim 7, the first component comprising a mobile unit and the second component comprising a base unit.
- 9. The system of Claim 7, the first component comprising a base unit and the second component comprising a mobile unit.

. 5

- 10. The system of Claim 7, further comprising:
- a fast hop counter for monitoring a number of consecutive line quality indicators greater than a fast hop threshold to determine a fast hop count; and

the error detector also for providing communication with the first component at the second frequency when the fast hop count is greater than a fast hop value.

- 11. The system of Claim 10, the first component comprising a mobile unit and the second component comprising a base unit.
- 12. The system of Claim 10, the first component comprising a base unit and the second component comprising a mobile unit.

ford

c

20

25

13. A method for conserving power in a wireless communication system, comprising:

providing communication between a first and second component;

transmitting an initial signal from the first component to the second component at a first power level;

receiving the initial signal from the first component at the second component;

determining a communication strength for the initial signal at the second component; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level based on the communication strength for the initial signal.

- 14. The method of Claim 13, the communication strength greater than a desired range and the second power level less than the first power level.
- 15. The method of Claim 13, the communication strength less than a desired limit and the second power level greater than the first power level.
- 16. The method of Claim 13, the first component comprising a mobile unit and the second component comprising a base unit.
- 17. The method of Claim 13, the first component comprising a base unit and the second component comprising a mobile unit.